Claim 1, : A rotary wing having a spar that flexes and mounts a wing sheets forming flying surface extending spanwise and rotatable about the spar longitudinal axis without transmission of flexural movement to the wing sheets, the spar mounting a rotatable transverse rib, the said transverse rib comprising a power transmission means coaxially mounted for axial rotation about said spar, the said transverse rib comprising generally spanwise opposed rib means extending within a portion of the wing sheets and detached from said wing sheets.

Claim 2, : A rotary wing having a spar that flexes and crosses its axis and mounts a wing sheets forming flying surface rotatable about the said spar without transmission of flexural movement to the wing sheets, the said spar mounting a rotatable transverse rib, the said transverse rib comprising a drive means coaxially mounted for axial rotation about said spar, the said transverse rib comprising generally spanwise rib means extending within a portion of the said wing sheets such that the wing sheets are capable of sliding on said spanwise rib means, the said rib means engaging the wing sheets such that axial rotation of said drive means is transmitted to said wing sheets.

Claim 3, : An assembly according to Claim 2, the power driving the said spanwise rib means not applied to them from within the wing sheets.

Claim 4, : A rotary wing having a spar that flexes and crosses its axis, and wing sheets forming flying surfaces and mounted upon a frame including said spar and rotatable about the longitudinal axis of said spar without transmission of flexural movement to the wing sheets, the spar mounting a rotatable transverse rib adapted to receive power transmission through a drive means coaxially mounted to said transverse rib for axial rotation about said spar, the said transverse rib carrying opposed rib means extending generally spanwise within a portion of the said wing sheets such that the wing sheets are capable of sliding upon the said rib means, the said rib means engaging the wing sheets such that axial rotation of said drive means is transmitted to said wing sheets, the said transverse rib and the said rib means constituting a structure independent from said frame, the wing sheets being driven by a structure bringing no contribution to the wing sheets structural strenght.

Claim 5, : An assembly according to Claim 2 , the said rib means engaging a portion of the wing sheets such that the axial rotation is transmitted through a relative movement between said rib means and the said wing sheets, wherein the wing sheets undergo limited movement in the plane of the wing relatively to said rib means while the said rib means are relatively fixed in the said plane, wherein the said rib means keep generally parallel to the spar longitudinal axis during the 360° of angular rotation, the

said

said limited movement being produced by the relative movement between the wing sheets and thew frame.

Claim 6, : An assembly according to Claim 4, whereby the said frame does not transmit rotation to said rib means.

Claim 7, : A rotary wing comprising a spar that flexes, the spar being mounted upon an aircraft fuselage, and wing sheets forming a flying surface and mounted upon a frame including said spar and rotatanble about said spar without transmission of flexural movement to the wing sheets, the said fuselage comprising an engine, the spar mounting a rotatable transverse rib adapted to receive power from said engine through a power transmission means coaxially mounted to said transverse rib, the said transverse rib comprising generally spanwise rib means extending within a portion of the wing sheets, the wing sheets being capable of limited movement relatively to said rib means, the said rib means engaging the wing sheets such that the said engine is capable of transmission of power to the said flying surface without transmission of power to the said frame.

Claim 8, : An assembly according to Claim 4, the said spanwise rib means being fixed to said transverse rib in position suitable for engaging the wing sheets while allowing the relative movement between the wing sheets and the frame.

Claim 9, : An assembly according to Claim 2 , the said flying surface including longitudinal edges, the said spanwise rib means mounted at a chordal distance between them such that they keep clear from the said longitudinal edges and the wing sheets are able to angle in the chordal plane while the spar has reached its maximum flexion.

Claim 10, : An assembly according to Claim 2 , the said flying surface including a root chordal edge, wherein a chordal clearanc in the plane of the wing between the said transverse rib and the said chordal edge is maintained such to accomodate the angling of the said chordal edge during the 360° of angular rotation of the said flying surface.

Claim 11, : An assembly according to Claim 1, wherein the said rib means driving the wing sheets are positioned not in a chordwise direction.

Claim 12, : An assembly according to Claim 2 , the said spanwise rib means mounting coaxial tubes capable to turn about them, wherein the said tubes engage the wing sheets such that they transmit rotation to the said wing sheets while being capable of limited rolling on the said wing sheets during the limited movement between said spanwise rib means and the said wing sheets.

Claim 13, : An assembly according to Claim 2 , the said spanwise rib means transmitting rotation to the wing sheets being not fixed to the spar and not rotated by the spar.

Claim 14, : An assembly according to Claim 2 , the said spanwise ribs being independent from the spar flex.

Claim 15, : An assembly according to Claim 4 , the axial rotation to the wing sheets being not transmitted through a relative movement between the wing sheets and frame means, wherein the said rotation is transmitted through a relative movement between the wing sheets and rib means not constituting part of the frame.

Claim 16, : An assembly according to Claim 2 , wherein the spar has no drive means fixed to it.

Claim 17, : An assembly according to Claim 4 ,the chordal distance between said rib means being suitable for engaging the wing sheets and drive them for axial rotation while not hindering the relative movement between the wing sheets and the frame.

Claim 18, : An assembly according to Claim 2 ,the rotation being not transmitted to the wing sheets by the wing sheets of an

adjacent flying surface with an autonomous assembly to achieve the flexing of the spar.

Claim 19, : An assembly according to Claim 1, the power being transmitted only to the root portion of the flying surface flanking the fuselage.

Claim 20, : An assembly according to Claim 2, the said transverse rib and the said drive means being mounted such that a spanwise clearance between them is maintained.

Claim 21, : An assembly according to Claim 2, the transmission of rotation to the wing sheets being achieved without transmission of rotation to the spar.

Claim 22, : An assembly according to Claim 7, the rotation being not transmitted through a relative movement between the wing sheets of two adjacent flying surfaces each with an autonomous assembly to achieve the spar flex, wherein the wing sheets of one flying surface transmit rotation to the wing sheets of the other flying surface.